

WHAT IS CLAIMED IS:

1. A light emitting device comprising:
- a pixel portion;
  - a switching thin film transistor in the pixel portion;
  - 5 a current control thin film transistor in the pixel portion;
  - at least an EL element electrically connected to the current control thin film transistor in the pixel portion;
  - wherein the switching thin film transistor is an n-channel thin film transistor;
  - 10 wherein the current control thin film transistor is a p-channel thin film transistor;
  - a first pixel including a first EL element for emitting a red light in the pixel portion;
  - a second pixel including a second EL element for emitting a green
  - 15 light in the pixel portion;
  - a third pixel including a third EL element for emitting a blue light in the pixel portion;
  - wherein a triplet compound is used in the first EL element while a singlet compound is used in each of the second and third EL elements.
2. A light emitting device comprising:
- a pixel portion;
  - a switching thin film transistor in the pixel portion;

- a current control thin film transistor in the pixel portion;
- at least an EL element electrically connected to the current control thin film transistor in the pixel portion;
- wherein the switching thin film transistor is a p-channel thin film transistor;
- 5 wherein the current control thin film transistor is an n-channel thin film transistor;
- a first pixel including a first EL element for emitting a red light in the pixel portion;
- 10 a second pixel including a second EL element for emitting a green light in the pixel portion;
- a third pixel including a third EL element for emitting a blue light in the pixel portion;
- wherein a triplet compound is used in the first EL element while a singlet compound is used in each of the second and third EL elements.
- 15

3. A light emitting device comprising:

- a pixel portion;
- a switching thin film transistor in the pixel portion;
- a current control thin film transistor in the pixel portion;
- 20 at least an EL element electrically connected to the current control thin film transistor in the pixel portion;
- wherein the switching thin film transistor is an n-channel thin film transistor;

wherein the current control thin film transistor is an n-channel thin film transistor;

a first pixel including a first EL element for emitting a red light in the pixel portion;

5 a second pixel including a second EL element for emitting a green light in the pixel portion;

a third pixel including a third EL element for emitting a blue light in the pixel portion;

10 wherein a triplet compound is used in the first EL element while a singlet compound is used in each of the second and third EL elements.

4. A light emitting device comprising:

a pixel portion;

a switching thin film transistor in the pixel portion;

a current control thin film transistor in the pixel portion;

15 at least an EL element electrically connected to the current control thin film transistor in the pixel portion;

wherein the switching thin film transistor is a p-channel thin film transistor;

20 wherein the current control thin film transistor is a p-channel thin film transistor;

a first pixel including a first EL element for emitting a red light in the pixel portion;

a second pixel including a second EL element for emitting a green

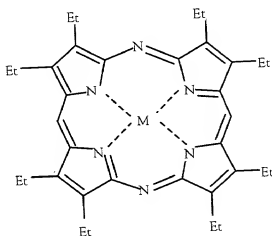
light in the pixel portion;

a third pixel including a third EL element for emitting a blue light in the pixel portion;

- wherein a triplet compound is used in the first EL element while a  
5 singlet compound is used in each of the second and third EL elements.

5. A device according to claim 1,

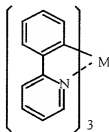
wherein the triplet compound is represented by



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6. A device according to claim 1,  
wherein the triplet compound is represented by



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7. A device according to claim 5,  
wherein the element belonging to Groups 8-10 in the periodic table  
5 is one selected from the group consisting of platinum, iridium, nickel, cobalt and palladium.

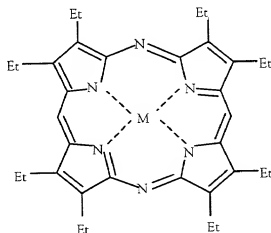
8. A device according to claim 1,  
wherein each of the switching thin film transistor and the current  
control thin film transistor is a bottom gate thin film transistor.

- 10 9. A device according to claim 1,  
wherein each of the switching thin film transistor and the current  
control thin film transistor is an inverted stagger thin film transistor.

10. A module using the light emitting device of claim 1.
11. An electrical apparatus using the light emitting device of claim 1.
12. A portable telephone using the light emitting device of claim 1.
13. A digital camera using the light emitting device of claim 1.
- 5 14. An audio equipment using the light emitting device of claim 1.
15. A method of operating the EL element of claim 1 in a range of 10V or less.
16. A method of operating the EL element of claim 2 in a range of 10V or less.
- 10 17. A method of operating the EL element of claim 3 in a range of 10V or less.
18. A method of operating the EL element of claim 4 in a range of 10V or less.
- 15 19. A device according to claim 6,  
wherein the element belonging to Groups 8-10 in the periodic table

is one selected from the group consisting of platinum, iridium, nickel, cobalt and palladium.

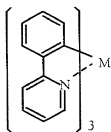
20. A device according to claim 2,  
wherein the triplet compound is represented by



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- 5 21. A device according to claim 2,  
wherein the triplet compound is represented by



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22. A device according to claim 20,

wherein the element belonging to Groups 8-10 in the periodic table is one selected from the group consisting of platinum, iridium, nickel, cobalt and palladium.

5 23. A device according to claim 21,

wherein the element belonging to Groups 8-10 in the periodic table is one selected from the group consisting of platinum, iridium, nickel, cobalt and palladium.

24. A device according to claim 2,

10 wherein each of the switching thin film transistor and the current control thin film transistor is a bottom gate thin film transistor.

25. A device according to claim 2,

wherein each of the switching thin film transistor and the current control thin film transistor is an inverted stagger thin film transistor.

15 26. A module using the light emitting device of claim 2.

27. An electrical apparatus using the light emitting device of claim 2.

28. A portable telephone using the light emitting device of claim 2.

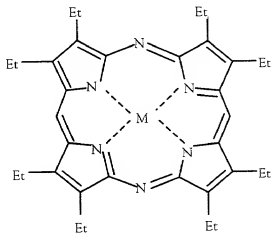


29. A digital camera using the light emitting device of claim 2.

30. An audio equipment using the light emitting device of claim 2.

31. A device according to claim 3,

wherein the triplet compound is represented by



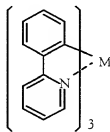
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32. A device according to claim 3,

wherein the triplet compound is represented by



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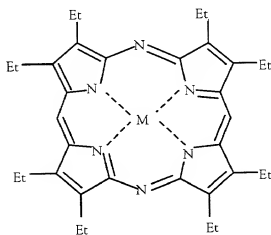
33. A device according to claim 31,  
wherein the element belonging to Groups 8-10 in the periodic table  
is one selected from the group consisting of platinum, iridium, nickel, cobalt and  
palladium.
- 5        34. A device according to claim 32,  
wherein the element belonging to Groups 8-10 in the periodic table  
is one selected from the group consisting of platinum, iridium, nickel, cobalt and  
palladium.
- 10       35. A device according to claim 3,  
wherein each of the switching thin film transistor and the current  
control thin film transistor is a bottom gate thin film transistor.
36. A device according to claim 3,  
wherein each of the switching thin film transistor and the current  
control thin film transistor is an inverted stagger thin film transistor.
- 15       37. A module using the light emitting device of claim 3.
38. An electrical apparatus using the light emitting device of claim 3.
39. A portable telephone using the light emitting device of claim 3.

40. A digital camera using the light emitting device of claim 3.

41. An audio equipment using the light emitting device of claim 3.

42. A device according to claim 4,

wherein the triplet compound is represented by

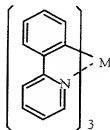


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5 43. A device according to claim 4,

wherein the triplet compound is represented by



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44. A device according to claim 42,  
wherein the element belonging to Groups 8-10 in the periodic table is one selected from the group consisting of platinum, iridium, nickel, cobalt and palladium.
- 5      45. A device according to claim 43,  
wherein the element belonging to Groups 8-10 in the periodic table is one selected from the group consisting of platinum, iridium, nickel, cobalt and palladium.
- 10      46. A device according to claim 4,  
wherein each of the switching thin film transistor and the current control thin film transistor is a bottom gate thin film transistor.
47. A device according to claim 4,  
wherein each of the switching thin film transistor and the current control thin film transistor is an inverted stagger thin film transistor.
- 15      48. A module using the light emitting device of claim 4.
49. An electrical apparatus using the light emitting device of claim 4.
50. A portable telephone using the light emitting device of claim 4.

51. A digital camera using the light emitting device of claim 4.

52. An audio equipment using the light emitting device of claim 4.

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